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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,780	04/12/2001	Dieter H. Nattkemper	100.168US01	3923
7590	03/22/2004			EXAMINER
Fogg, Slifer & Polglaze, P.A. P.O. Box 581009 Minneapolis, MN 55458-1009			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	
			DATE MAILED: 03/22/2004	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/833,780	NATTKEMPER ET AL.	
	Examiner	Art Unit	
	Derrick W. Ferris	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 and 42-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-40 and 42-54 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 April 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4.5.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. **Claims 1-40 and 42-54** as originally filed are still in consideration for this application.
2. Examiner does **not withdraw** the obviousness rejection to *Parruck, Parruck* in view of *Black* and in further view of *Rice, Parruck* in view of *Gagnaie, Parruck* in view of *Gagnaie* in further view of *Rice* for Office action filed 10/23/03. In addressing applicant's arguments in the response filed 02/17/04, applicant argues that the limitations of learning at least one of a first virtual circuit identifier, learning at least one of a second virtual circuit identifier, and creating a translation connection between the first and second network connections are potentially at issue for claims 1, 11, 20, 29, 42, and 49. In short, *Parruck* expressly teaches learning a first and second VCI and creating a translation connection would have been obvious given the background of *Parruck*. Examiner would like to further point out that not recited in the claims is how a translation connection is created (i.e., it appears applicant assumes that the translation uses a first and second VCI which may be improper since there is no recited relationship between a VCI and the translation connection). Applicant's argument of hindsight is invalid since if the motivation provided by the examiner were not true, then the devices disclosed by *Parruck* would not be able to communicate with one another thus causing *Parruck's* invention to not function properly (i.e., invalidating the examiner's motivation would depart from the spirit and scope of *Parruck's* invention). As such, examiner assumes a reasonable but broad interpretation of a "translation connection". Finally, examiner rewrote the rejection to clarify the examiner's position. As to claim 38, also see the cleaned up rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6, 10-15, 18-24, 27, 49-51 and 53-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,349,098 to *Parruck et al.* ("Parruck").

As to **claim 1**, *Parruck* discloses a method and apparatus for forming a permanent virtual circuit using a reasonable but broad interpretation of "permanent". In particular, *Parruck* discloses an improved method for automatically forming a virtual circuit in an ATM switch [Abstract]. With respect to *Parruck* one example of a first reference point might be the first bi-port 410(p) shown in figure 3 such that a first network element might be telephone 201 and a second network element might be output port 510(p). Input port 410(p) performs the step of detecting initiation of communication between a first and second network. In particular, *Parruck* discloses receiving an initialization signal from the first network where the initialization signal receives and learns at least one VCI based on information in the CRC (e.g., see column 6, lines 59-65). Once received, InPort Processor 610 sends a SETUP signal to the destination OutPORT processor where the OutPORT processor echoes back connections parameters such that Input port 410(p) receives and learns a second VCI of the second network element (see e.g., column 7, lines 1-12).

What may not be clear from the reference is the further limitation of creating a translation connection between the first and second network elements. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to create a translation connection. Examiner notes a reasonable but broad interpretation of "translation connection". In particular, examiner notes a "translation connection" is stored in a lookup device associated with InSAP 414 (see e.g., column 7, lines 1-11). One skilled in the art would be motivated to create a translation connection for the purpose of allowing the first network element to communicate with the second network element through the reference point that contains the translation connection. Stated another way, one skilled in the art would note that an association needs to be made between the first VCI and second VCI. This motivation is taught e.g., at column 2, lines 27-30 of Background of *Parruck*. A reasonable expectation of success is also taught since the first network element device must communicate with the second network element device through the reference point where the lookup table acts as a "translation connection" such that the "translation connection" creates an association between the first and second network device. Stated another way, if there were no association in the lookup tables then the devices would not be able to communicate which would teach away from the instant invention. Furthermore, examiner notes a reasonable but broad interpretation of "translation connection" to be anything that connects the two networks together (i.e., and not just a lookup or routing table as provided forth in the rejection).

Examiner also notes another interpretation where switching unit 600 acts as a first reference point and a first network element is the InPORT 410 (p) and the second

network element is the OutPORT 510(p). Using this interpretation the VCI information is received and learned through CSC signals (see e.g., column 7, lines 9-26). Here the CSC signals that contain VCI information form connections tables/routing tables where examiner notes similar reasoning in that it would have been obvious to one skilled in the art prior to applicant's invention to create a translation connection from the connection tables using the same motivation and reasonable expectation level of success.

As to **claims 2-3**, see column 7, lines 13-24; column 9, lines 1-15; and column 10, lines 46-64.

As to **claim 4**, see figure 10c.

As to **claim 5**, *Parruck* is silent or deficient to creating a new translation connection using the changed virtual circuit identifier. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to create a new translation connection. *Parruck* helps cure the above cited deficiency by checking the validity of the connection. If the connection is no longer valid then the connection is torn down. Assuming the "changed virtual identifier" is learned by the ATM switch, then one skilled in the art would be motivated to retransmit the lost or remaining data using the "changed connection identifier". Examiner notes support is provided by *Parruck* at column 9, lines 20-25.

As to **claim 6**, see at least column 9, lines 1-25.

As to **claim 10**, see the rejection for claim 1.

As to **claim 11**, see the rejection for claim 1.

As to **claim 12**, see the rejection for claim 2.

As to **claim 13**, see the rejection for claim 3.

As to **claim 14**, see the rejection for claim 5.

As to **claim 15**, see the rejection for claim 6.

As to **claim 18**, see the rejection for claim 1.

As to **claim 19**, see the rejection for claim 10.

As to **claim 20**, see the rejection for claim 1.

As to **claim 21**, see the rejection for claim 2.

As to **claim 22**, see the rejection for claim 3.

As to **claim 23**, see the rejection for claim 5.

As to **claim 24**, see the rejection for claim 6.

As to **claim 27**, see the rejection for claim 10.

As to **claim 49**, see the rejection for claim 11.

As to **claim 50**, see the rejection for claim 5.

As to **claim 51**, see the rejection for claim 6.

As to **claim 53**, see the rejection for claim 18.

As to **claim 54**, see the rejection for claim 10.

5. **Claims 7, 8, 16, 17, 25, 28, and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,349,098 to *Parruck et al.* ("Parruck") in view of "ATM Foundation for Broadband Networks" to *Black* and in further view of "Soft PVCS in an ATM Network" to *Rice*.

As to **claim 7**, *Parruck* is silent or deficient to a predetermined number of changes. Examiner notes that it would have been obvious to one skilled in the art prior to

applicant's invention to use a predetermined number of changes. In particular, examiner notes that *Black* discloses a predetermined number of changes at page 254 (i.e., the ATM specifications require that only one retry may be attempted after which a null state must be entered). Thus *Black* provides support and motivation for a predetermined number of changes. Examiner notes *Rice* teaches one example of how SVC connections may be used in an ATM switch as part of a soft PVC (i.e., PVCs on the edge as claimed by applicant and an SVC in the core of an ATM switch matrix as possible taught by *Parruck*). *Rice* also provides a further motivation to combine the reference by disclosing that a DSLAM uses SPVCs (see page 4).

As to **claim 8**, *Parruck* is silent or deficient to a "predetermined amount of time" where examiner notes a similar obviousness rejection can be applied as above for claim 8 where *Black* teaches the use of timers on page 250.

As to **claim 16**, see the rejection for claim 7.

As to **claim 17**, see the rejection for claim 8.

As to **claim 25**, see the rejection for claim 7.

As to **claim 28**, see the rejection for claim 8.

As to **claim 52**, see the rejection for claim 8.

6. **Claims 9, 26, 29-33, 35-36, 38-40, 42-44, and 47-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,349,098 to *Parruck et al.* ("*Parruck*") in view of "An Overview of Broad-band Access Technologies" to *Gagnaire*.

As to **claim 9**, *Parruck* teaches an associate network using a reasonable but broad interpretation of "associated network". However, assuming, al arguendo, that *Parruck*

does not teach an “associated network”, then examiner notes that it would have been obvious to one skilled in the art prior to applicant’s invention to use an “associated network”. As support and motivation, *Gagnaire* teaches an “associated network” shown in figure 11, at page 1964. In particular, examiner notes that the digital switch disclosed by *Parruck* is represented as the DSLAM or ATM-C device as is known in the art.

As to **claim 26**, see the rejection for claim 9.

As to **claim 29**, combine the rejections of claim 1 and 9.

As to **claim 30**, see the rejection for claim 2.

As to **claim 31**, see figure 11 at page 1964.

As to **claim 32**, see the rejection for claim 5.

As to **claim 33**, see the rejection for claim 6.

As to **claim 35**, see the rejection for claim 29.

As to **claim 36**, see the rejection for claim 10.

As to **claim 38**, *Parruck* may not clearly show a customer premise equipment.

Examiner notes that it would have been obvious to one skilled in the art to include a customer premise equipment where the customer premise equipment is coupled to the central unit. As support and motivation, *Gagnaire* cures the above-cited deficiency by disclosing a CPE coupled to a central unit (see e.g., figure 11). Here one skilled in the art would be motivated to modify the reference to place either the phone 201 or the InPORT 401(p) as part of the customer premise in order to allow the end user more flexibility when placing a call. Figure 11 shows a reasonable expectation of success since ATM (which contains VCI information) runs between the CPE and the central unit (i.e., the

switching fabric 800 of *Parruck* is ATM). In addition, since *Parruck* shows the input port 410(p) and the switching unit 600 as inside an ATM switch 200 examiner notes a reasonable but broad interpretation of embedding the activation function within the central unit.

As to **claims 39 and 40**, see figure 11 at page 1964.

As to **claim 42**, see the rejection for claim 9.

As to **claim 43**, see the rejection for claim 4.

As to **claim 44**, see the rejection for claim 5.

As to **claim 47**, see the rejection for claim 9.

As to **claim 48**, see the rejection for claim 10.

7. **Claims 34, 37, 45, and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,349,098 to *Parruck et al.* (“*Parruck*”) in view of “An Overview of Broadband Access Technologies” to *Gagnaire* and “ATM Foundation for Broadband Networks” to *Black* and in further view of “Soft PVCS in an ATM Network” to *Rice*.

As to **claim 34**, see the rejection for claim 7.

As to **claim 37**, see the rejection for claim 8.

As to **claim 45**, see the rejection for claim 7.

As to **claim 46**, see the rejection for claim 8.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

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